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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,670	01/22/2001	Shu Murayama	0649-0769P-SP	6398

7590 08/02/2004
BIRCH, STEWART, KOLASCH & BIRCH, LLP
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EXAMINER

MACE, BRAD THOMAS

ART UNIT PAPER NUMBER

2663

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/765,670	MURAYAMA ET AL.	
	Examiner	Art Unit	
	Brad T. Mace	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/22/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because reference 44 on line 7 should be 43. Correction is required. See MPEP § 608.01(b).
2. The disclosure is objected to because of the following informalities: "low" should be "high" on line 10 of pg. 4. The word "high" is missing before "definition" on line 20 of pg. 5. "." is missing after "discussed on line 15 of pg. 10. "44" should be "43" on line 23 of pg. 10. Lines 9-15 of pg. 11 states that each media data coding and multiplexing apparatus comprises a multiplexing section of six inputs, however only media data coding and multiplexing apparatus 4 has this feature as shown in Figure 1. Lines 2-6 of pg. 15 fails to disclose the included multiplexing of the three inputs 119, 129, and 139 as shown in Figure 1. "44" should be "43" on line 13 and line 15 of pg. 17. It is not clear as to what the external outputs (115, 116, 117) are on line 3 of pg. 25. "ieces" should be "pieces" on line 11 of pg. 30. Appropriate correction is required.

Drawings

3. Figure 5 and 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of

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any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: references 211, 221, and 231, of Figure 1. Also, reference 1 of Figure 4 was not mentioned in the description. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 6-9, and 10-13 are objected to because of the following informalities: "apparatus" should be "apparatuses" on line 4 of claim 6, on line 4 of claim 7, on line 4 of claim 8, and on line 4 of claim 9. "MPEG2" should be placed between "the" and "standard" on line 6 of claim 10. "MPEG4" should be placed between "the" and "standard" on line 6 of claim 11. "ITU-T H.223" should be placed between "the" and

"standard" on line 6 of claim 12. "ITU-T H.225" should be placed between "the" and "standard" on line 5 of claim 13. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3, 4, 5, 6, 8, 9, 10, 11, 12, and 13, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims 3, 4, 5, 6, 8, 9, 10, 11, 12, and 13 do not clearly state setting a parameter in what. In claim 9, the term "etc." (on line 7 and 13) renders the claim indefinite.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,671,226 (Murakami et al.).

Regarding claims 1, 14:

10. Murakami et al. discloses a media data coding and multiplexing method and apparatus (see references 1a and 2a of Figure 2) comprising a coding section (see references 9a-9c of Figure 2) for coding a plurality of media data (see references 11a-11c of Figure 2) to output a plurality of coded media data (see references 111-113 of

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Figure 2), a multiplexing section (see reference 2a of Figure 2) for packeting the plurality of coded media data output from the coding section (see reference 233 of Figure 2 in which the plurality of coded data was output from reference 1a in Figure 2) to generate a plurality of packet strings (see reference 242 of Figure 2) and multiplexing the plurality of packet strings with each other to output a multiplexed packet string (see references 242, 234a, and 13a of Figure 2), and a parameter setting section for selectively adding a parameter to the multiplexed packet string output from the multiplexing section to output a result (see reference 10a of Figure 2 and col. 14, lines 24-34, and col. 15, lines 32-50, where the packet generating portions adds additional information (parameters, such as media identification) to each packet. Since each coded stream 12 is applied to the packet generating portions and since each resulting packet from the packet generating portions is sent into the packet multiplexing circuit, then in effect the packet generating portions selectively adds a parameter to the multiplexed packet string output, which in turn outputs a multiplexed packet string (a result)).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,671,226 (Murakami et al.).

Regarding claims 10-13:

13. Murakami et al. discloses substantially all the claimed modified invention as specified above, however, does not disclose expressly that the set parameter conforms to the MPEG2, MPEG4, ITU-T H.223, or ITU-T H.225 standard.

However, Industrial standards such as MPEG2, MPEG4, ITU-T H.223, or ITU-T H.225 are well known and expected in the art for devices utilizing video streams so that they can receive and execute from common standard.

Therefore, a person of ordinary skill in the art would have been motivated to employ the Industrial standards in Murakami et al. in order to obtain a parameter setting section that sets a parameter in packets conforming the MPEG2, MPEG 4, ITU-T H.223, or ITU-T H.225 standard. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine the Industrial standards with Murakami et al. (collectively Murakami et al.- Industrial standards) to obtain the invention as specified in claims 1 and 10, 1 and 11, 1 and 12, and 1 and 13. The suggestion/motivation to do so would have been to use the Industrial standards so that the system can be utilized for devices compatible with these standards.

14. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,671,226 (Murakami et al.) in view of the admitted prior art.

Regarding claim 2:

15. Murakami et al. discloses a media data coding and multiplexing system (see Figure 2) comprising a plurality of media data coding and multiplexing apparatuses (see

references 1a, 1b, 1c, 2a, and 2b of Figure 2, where 1a-2a, 1b-2a, and 1c-2a are effectively media data coding and multiplexing apparatuses) each comprising a coding section (see references 9a-9c of Figure 2) for coding a plurality of media data (see references 11a-11c of Figure 2) to output a plurality of coded media data (see references 111-113 of Figure 2), a multiplexing section (see reference 2a of Figure 2) for packeting the plurality of coded media data output from the coding section (see reference 233 of Figure 2 in which the plurality of coded data was output from reference 1a in Figure 2) to generate a plurality of packet strings (see reference 242 of Figure 2) and multiplexing the plurality of packet strings with each other to output a multiplexed packet string (see references 242, 234a, and 13a of Figure 2), and a parameter setting section for selectively adding a parameter to the multiplexed packet string output from the multiplexing section to output a result (see reference 10a of Figure 2 and col. 14, lines 24-34, and col. 15, lines 32-50, where the packet generating portions adds additional information (parameters, such as media identification) to each packet. Since each coded stream 12 is applied to the packet generating portions and since each resulting packet from the packet generating portions is sent into the packet multiplexing circuit, then in effect the packet generating portions selectively adds a parameter to the multiplexed packet string output, which in turn outputs a multiplexed packet string (a result)). However, Murakami et al. does not disclose expressly a video signal divider circuit for dividing a video signal into a plurality of divided data and a control circuit for generating a control signal for controlling each of the plurality of coding and multiplexing apparatuses.

The admitted prior art discloses a video signal divider circuit (reference 56 of Figure 6) for dividing a video signal (reference 50 of Figure 6) into a plurality of divided data (references 511, 521, 531, 541 of Figure 6). The admitted prior art also discloses a control circuit (reference 58 of Figure 6) for generating a control signal (references 518, 528, 538, 548 of Figure 6).

A person of ordinary skill in the art would have been motivated to employ the admitted prior art in Murakami et al. in order to obtain a media data coding and multiplexing system utilizing a video signal divider circuit for dividing a video signal into a plurality of divided data for parallel processing and a control circuit to manage the operation of each media data coding and multiplexing apparatus. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine the admitted prior art with Murakami et al. (collectively Murakami et al.-admitted prior art) to obtain the invention as specified in claim 2. The suggestion/motivation to do so would have been to obtain a media data coding and multiplexing system that has a video signal divider so as to allow for parallel processing thus achieving high-speed processing for applications such as high-definition video and also a control circuit to control of each of the media data coding and multiplexing apparatuses so as to allow for the controlling of parallel processing.

16. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al.-admitted prior art as applied to claim 2 above, and further in view of U.S. Patent No. 6,426,778 (Valdez).

Regarding claim 7:

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17. Murakami et al.-admitted prior art discloses substantially all the claimed modified invention as above, however, does not disclose that in each of the media data coding and multiplexing apparatuses that the parameter setting section sets continuity index or clock reproduction information in multiplex units as the parameter.

Valdez discloses a 1-byte continuity index field that is set (incremented) for packets in a given group of packets (see col. 10, lines 19-21).

A person of ordinary skill in the art would have been motivated to employ Valdez in Murakami et al.-admitted prior art in order to obtain a parameter setting section that sets the continuity index in (multiplexed) packets. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Valdez with Murakami et al.-admitted prior art (collectively Murakami et al.-admitted prior art-Valdez) to obtain the invention as specified in claims 2 and 7. The suggestion/motivation to do so would have been to use the parameter setting section to set the continuity index field in each packet in order to maintain continuity amongst packets of a media data coding and multiplexing apparatus.

Allowable Subject Matter

18. Claims 3-6 and 8-9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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*Gebler et al. discloses sharing reference data between multiple encoders

parallel encoding a sequence of video frames

*Fujii discloses a multi-media communication apparatus for transmitting audio

information, video information and character information simultaneously

*Yuzawa discloses a data transmission device, reception device, data

transmission system, and data transmission method

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brad T. Mace whose telephone number is (703)-306-5454. The examiner can normally be reached on M-F, with the exception of every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (703)-305-4798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

b7m

Brad T. Mace
Examiner
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July 26, 2004


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PRIMARY EXAMINER